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## **2004 MICHIGAN BLACK BEAR HUNTER SURVEY**

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### **ABSTRACT**

*A random sample of bear hunters was contacted after the 2004 hunting season to determine hunter participation, hunting methods, bear harvest, and hunter satisfaction. In 2004, an estimated 8,700 hunters spent nearly 61,000 days afield and harvested about 2,200 bears, a decrease in harvest of 10% from 2003. Statewide, 25% of hunters harvested a bear. Baiting was the most common hunting method used to locate and harvest bears. Statewide, most hunters (52%) rated their hunting experience as very good or good. Also, most hunters (72%) approved of the preference-point system for the distribution of hunting licenses.*

### **INTRODUCTION**

Beginning in 1990, the Michigan Department of Natural Resources (DNR) created black bear (*Ursus americanus*) management units and limited the number of bear hunting licenses issued for each unit. Before 1990, an unlimited number of bear licenses were sold, and licenses were valid in all areas open to bear hunting. In 2000, the DNR modified the licensing system by implementing a preference-point system for issuing bear hunting licenses. Under this system, hunters received one preference point if they applied for a hunt but were not selected in the drawing. Hunters also could obtain a preference point by completing an application but forgoing the drawing. Applicants with the greatest number of preference points had the greatest chance of being selected for a hunt, except that no more than 2% of the licenses were issued to nonresidents.

In 2004, ten bear management units in Michigan totaling about 31,267 square miles (excluding Isle Royale) were open for bear hunting (Figure 1). The area open to bear hunting increased by 376 square miles (1.2% increase) with the addition of Leelanau County to the Baldwin Bear



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Management Unit. The area open to hunting also was recalculated to include the area of small offshore islands, which total about 220 square miles. The area of these islands was not included in previous estimates of the area open to bear hunting.

Bear could be hunted September 10-October 26 in most of the Upper Peninsula (UP) units except the Drummond Management Unit (September 10-16) and in the northern Lower Peninsula (LP) units (September 17-23). The Red Oak Management Unit in the LP also had an archery-only hunt during October 8-14. The Wildlife Division set license quotas for each management unit and allocated 11,250 licenses among 43,911 eligible applicants using the preference-point system. Licenses were valid on all land ownership types and allowed a hunter to take one bear of either sex, excluding cubs and female bears with cubs. Bear could be harvested with either firearm or archery equipment, except for the special archery-only hunt in the Red Oak Management Unit. Hunters could use bait or dogs to hunt bears (except dogs could not be used during September 10-14 in the UP, except on Drummond Island, and during the archery-only season in the Red Oak Management Unit).

The DNR has the authority and responsibility to protect and manage the wildlife resources of the State of Michigan. Harvest surveys are one of the management tools used by the Wildlife Division to accomplish its statutory responsibility. Estimating harvest, hunting effort, and hunter satisfaction are among the primary objectives of these surveys. Estimates derived from harvest surveys, as well as harvest reported by hunters at mandatory registration stations, are used to monitor bear populations and establish harvest regulations.

## **METHODS**

Following the 2004 bear hunting season, a questionnaire (Appendix A) was sent to 3,642 randomly selected successful applicants that had purchased a bear hunting license (resident, senior, nonresident bear licenses, and comprehensive lifetime license). Hunters receiving the questionnaire were asked to report whether they hunted, number of days spent afield, whether they harvested a bear, date of harvest, and their hunting methods. Hunters also reported whether other hunters caused interference during their hunt and whether the interference was caused by other bear hunters. Successful hunters were asked to report harvest date, sex of the bear taken, and harvest method. All hunters were asked to rate their overall hunting experience and indicate whether they approved of the preference-point system that was used to distribute hunting licenses. Finally, all hunters were asked what factors were important for selecting their hunting location.

Estimates were based on information collected from random samples of hunting license buyers. Thus, these estimates were subject to sampling errors (Cochran 1977). Estimates were calculated using a stratified random sampling design (Cochran 1977) and were presented along with their 95% confidence limit (CL). In theory, this confidence limit can be added and subtracted from the estimate to calculate the 95% confidence interval. The confidence interval is a measure of the precision associated with the estimate and implies that the true value would be within this interval 95 times out of 100. Unfortunately, there are several other possible sources of error in surveys that are probably more serious than theoretical calculations of sampling error. They include failure of participants to provide

answers (nonresponse bias), question wording, and question order. It is very difficult to measure these biases; thus, estimates were not adjusted for these possible biases.

Questionnaires were mailed initially during early November 2004, and up to two follow-up questionnaires were mailed to nonrespondents. Although 3,642 people were sent the questionnaire, 52 surveys were undeliverable resulting in an adjusted sample size of 3,590. Questionnaires were returned by 3,057 people, yielding an 85% adjusted response rate.

## RESULTS

In 2004, 9,295 bear hunting licenses were purchased, an increase of nearly 1% from 2003 (Table 1). Most of the people buying a license were men (92%), and the average age of the license buyers was 45 years (Figure 2). About 2% of the license buyers (218) were younger than 17 years old.

Nearly 94% ( $\pm 1\%$ ) of the license buyers hunted bear (Tables 1 and 2). These hunters spent 60,609 days afield ( $\bar{x} = 7.0$  days/hunter) and harvested 2,221 bears, a decrease of about 10% from 2003 (Figure 3, Table 2). Although fewer bear were taken in 2004 than during the previous year, the number of bear harvested was the fourth highest recorded since 1990. Moreover, the number of bear hunters in 2004 was the highest recorded (Figure 3). Counties having the highest number of bear hunters and bears harvested included Baraga, Ontonagon, Chippewa, Menominee, and Marquette (Table 3).

About 36% of the bear hunters hunted on private lands only, 44% hunted on public lands only, and 19% hunted on both private and public lands (Table 4). Bear hunters spent 22,326 days afield on private land, 24,955 days hunting on public land only, and 12,988 days hunting on both private and public lands (Table 5). Of the estimated 2,221 bear harvested in 2004,  $37 \pm 3\%$  of these bears were taken on private land ( $818 \pm 78$ ). About  $62 \pm 3\%$  of the harvest ( $1,377 \pm 101$ ) were taken on public land. A few bear ( $26 \pm 14$ ) were harvested from land of unknown ownership.

For bears that the harvest date was known, about 50% of these bears were taken during the first ten days of the hunting season (September 10-19, Figure 4). Of the bears harvested,  $62\% (\pm 3\%)$  were males ( $1,388 \pm 101$ ) and  $36\% (\pm 3\%)$  were females ( $803 \pm 79$ , Table 6). Statewide, 25% of hunters harvested a bear in 2004 (Table 2), a decrease from 27% hunter success reported last year (Frawley 2004). Hunter success ranged from 13-73% among the bear management units.

Most hunters ( $76 \pm 1\%$ ) used only firearms while hunting bear, although  $24 \pm 1\%$  of the hunters used archery equipment only or a combination of firearm and archery equipment (Table 7). Moreover, most hunters ( $83 \pm 1\%$ ) relied primarily on baiting as a means of locating and attracting bears (Table 8). About  $12\% (\pm 1\%)$  of hunters relied primarily on dogs alone or in combination with baiting to locate bears. About 3% of hunters relied on a hunting method not involving dogs or bait.

About  $78\% (\pm 3\%)$  of the harvested bears were taken with the aid of bait only (Table 9). The proportion of bears harvested with bait was similar to the proportion of hunters using bait as

their primary means of locating bears (78% versus 83%; Tables 8 and 9). Although 12% of the hunters used dogs to locate bears, 20% ( $\pm 3\%$ ) of the harvested bears were taken using dogs. Hunting success for hunters using dogs was 40% in 2004, while hunting success for hunters using bait only was 24%.

Statewide, most hunters ( $52 \pm 2\%$ ) rated their hunting experiences as very good or good and 24% ( $\pm 1\%$ ) rated their hunting experiences as being poor or very poor (Tables 3 and 10). Hunter satisfaction is affected by many factors such as hunting success and whether hunting activities were completed without interference (Figure 5). In 2004, 24% ( $\pm 1\%$ ) of the hunters ( $2,071 \pm 116$ ) were interfered with by other hunters. Most of this interference was caused by another bear hunter; 18% ( $\pm 1\%$ ) of the hunters ( $1,587 \pm 106$ ) reported that other bear hunters interfered with their hunt. Generally, hunters in the UP were less likely to be interfered with by other hunters than hunters in the LP (Tables 3 and 10, Figure 6).

In 2000, a preference-point system was implemented for distributing bear hunting licenses. Hunters were asked whether they approved of this distribution system. Most hunters ( $72 \pm 1\%$ ) approved or strongly approved of the system. About 15% ( $\pm 1\%$ ) of the hunters indicated that they were not sure about the system, and 12% ( $\pm 1\%$ ) disapproved or strongly disapproved of the system.

Bear hunters were asked which reasons were important for selecting their hunting location (Figure 7). Hunters most frequently cited high bear density as the most important factor used to select their hunting area ( $66 \pm 1\%$ ). Hunting an area where they experienced low hunting pressure ( $57 \pm 2\%$ ), hunting in a traditional hunting area ( $54 \pm 2\%$ ), and hunting where there were large amounts of public lands ( $52 \pm 2\%$ ) were the next most important reasons to select an area.

## **ACKNOWLEDGEMENTS**

I thank all the bear hunters that provided information. Theresa Riebow and Becky Walker completed data entry. The figure of Bear Management Units and the area open to hunting was provided by Marshall Strong. Michael Bailey, David Bostick, Dwayne Etter, Penney Melchoir, William Moritz, Cheryl Nelson-Fliearman, and Valerie Frawley reviewed a previous version of this report.

## **LITERATURE CITED**

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- Frawley, B. J., 2004. 2003 Michigan black bear hunter survey. Wildlife Division Report 3413. Michigan Department of Natural Resources, Lansing, USA.



Figure 1. Bear management units open to hunting in Michigan, 2004.

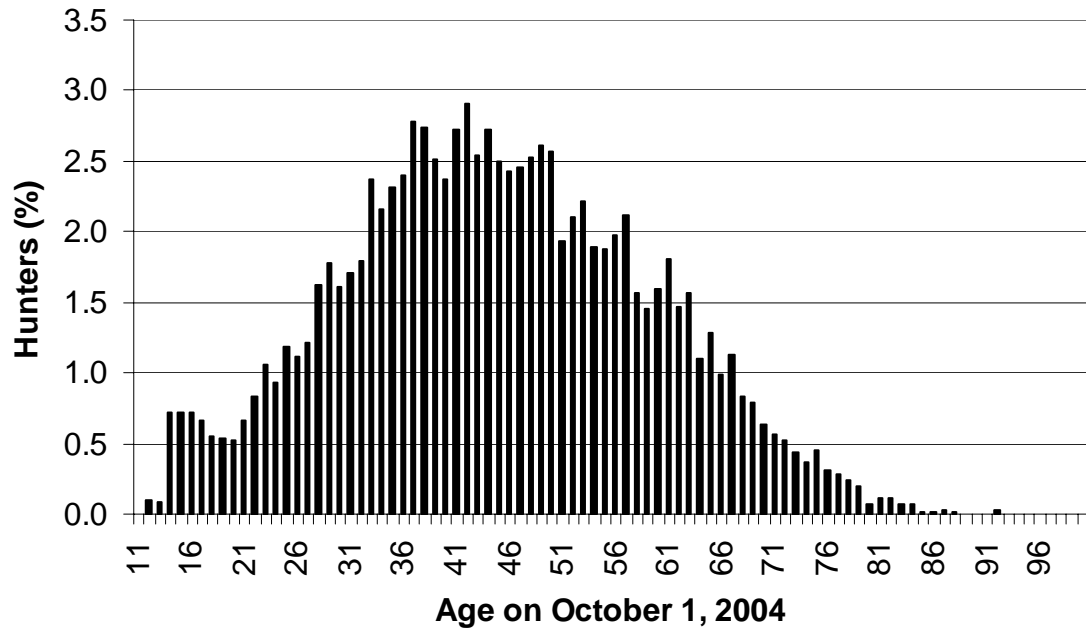


Figure 2. Age of people that purchased a bear hunting license in Michigan for the 2004 hunting season ( $\bar{x}$  = 45 years). Licenses were purchased by 9,295 people.

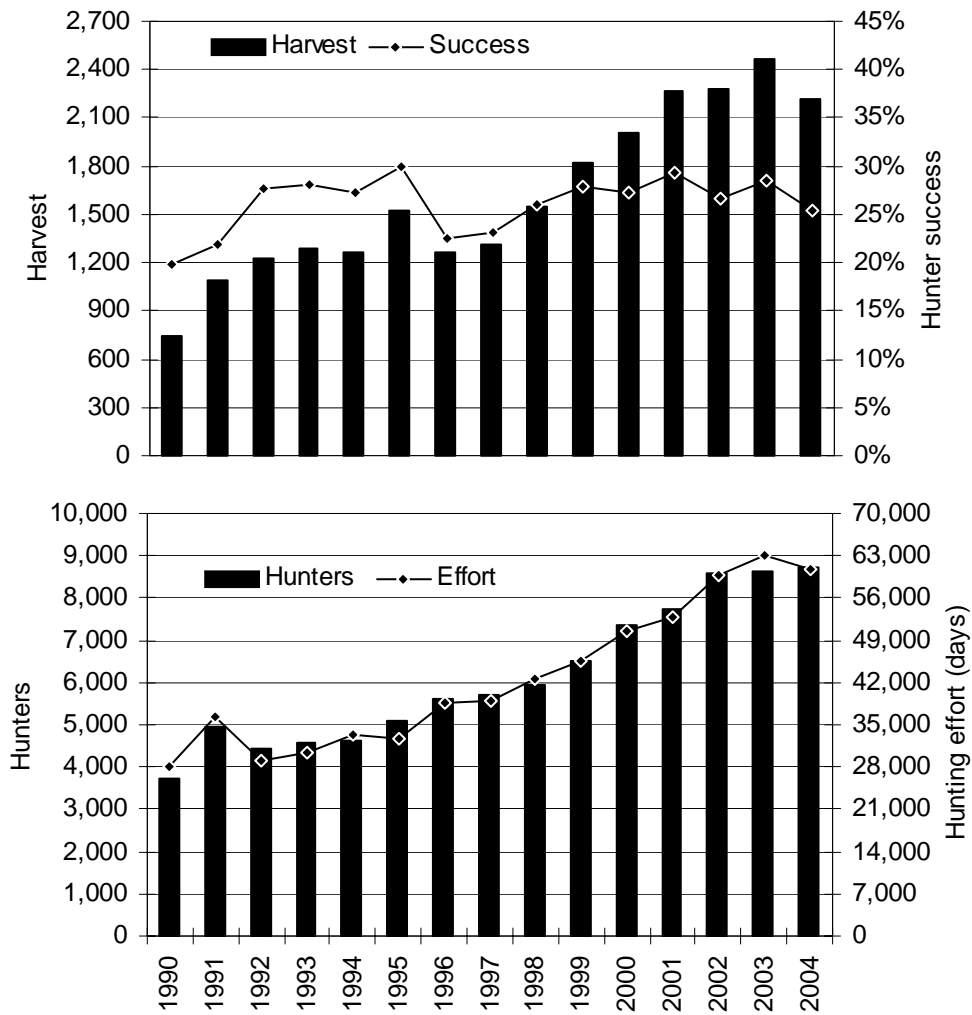


Figure 3. Estimated number of hunters, harvest, hunting effort, and hunting success during bear hunting seasons, 1990-2004.

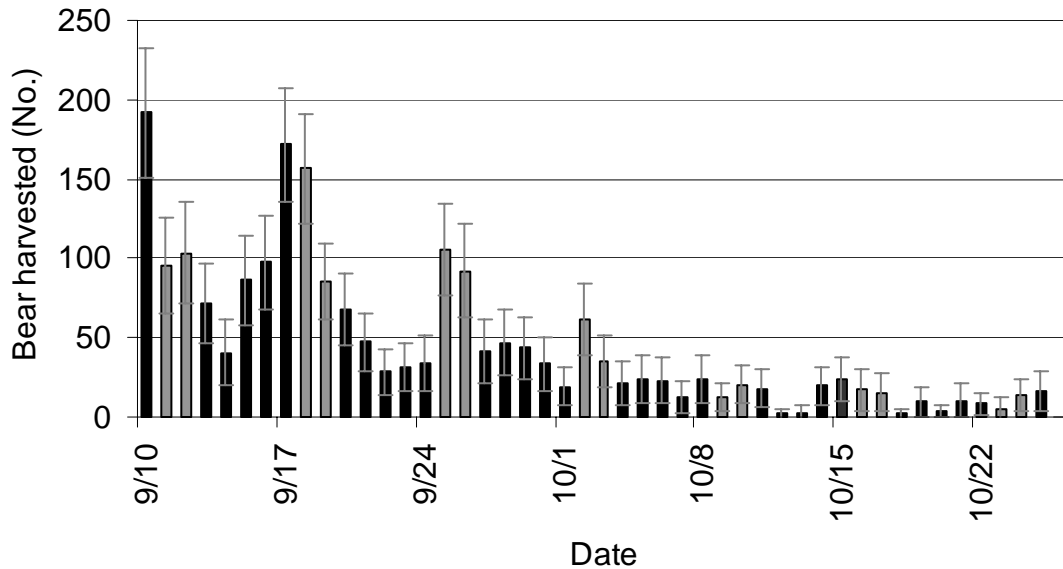


Figure 4. Estimated number of bear harvested by date during the 2004 bear hunting season (includes all hunt periods). An additional  $125 \pm 32$  bear were taken on unknown dates. Gray-shaded bars indicate weekends. Vertical bars represent the 95% confidence interval. The opening of the bear hunting season was September 10 in the UP and September 17 in the LP.

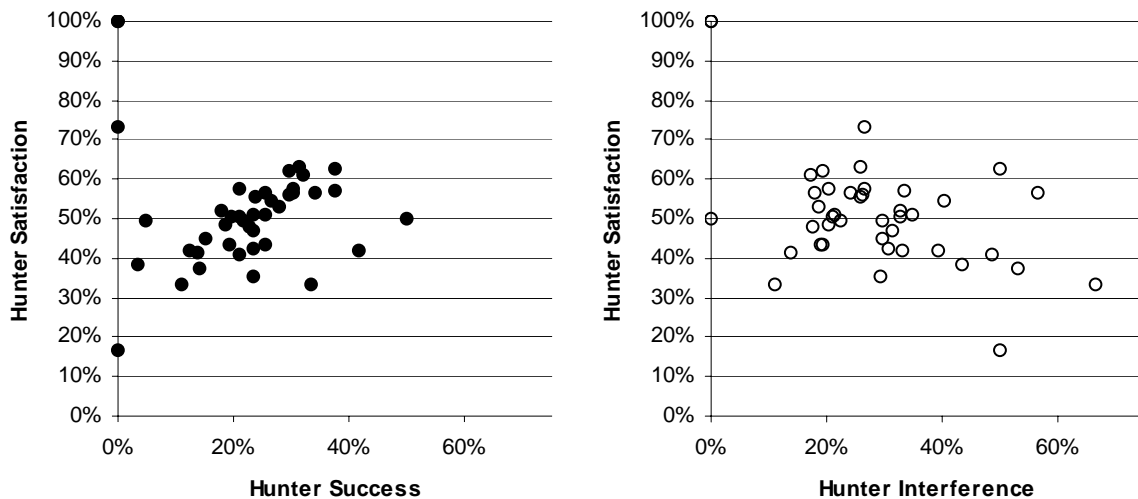


Figure 5. Hunter satisfaction (hunters rating their hunting experience as very good or good) relative to hunter success and hunter interference for each of 42 counties in Michigan during the 2004 bear hunting season. Interference was the proportion of hunters that reported interference from other hunters (all types of hunters).



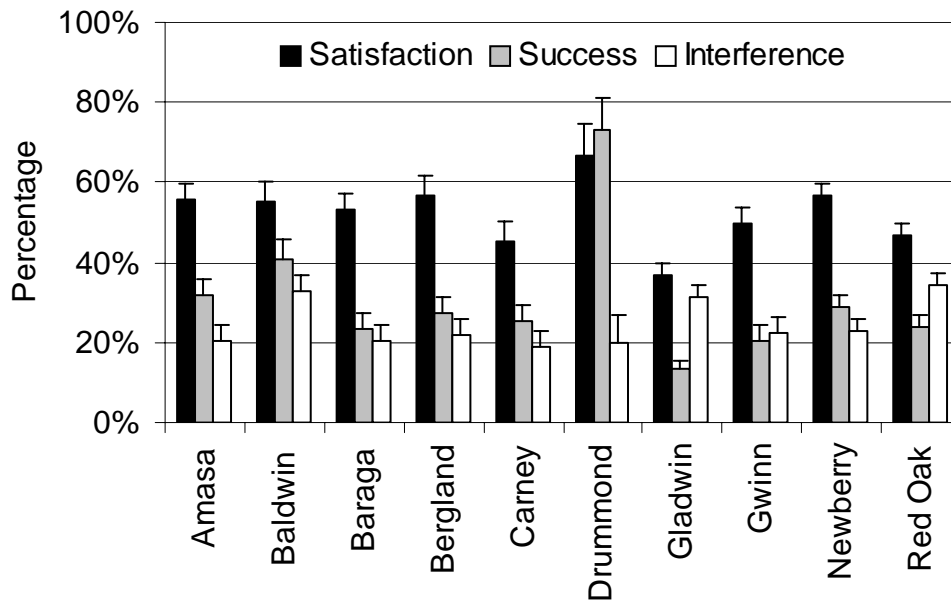
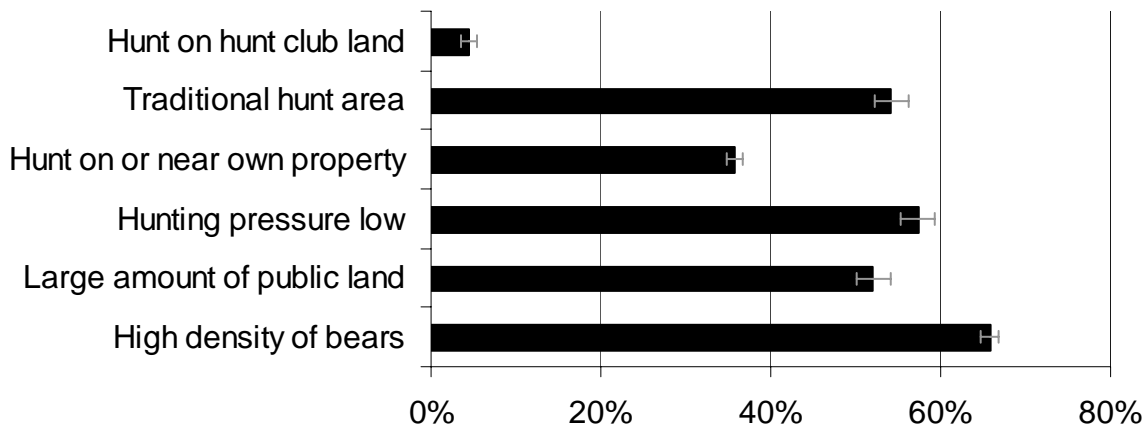


Figure 6. Estimated hunter satisfaction, hunting success, and level of hunter interference in Michigan's management units during the 2004 bear hunting season. Satisfaction measures the proportion of hunters rating their hunting experiences as very good or good. Error bars represent the 95% confidence limit. Interference was the proportion of hunters that reported interference from other hunters (all types of hunters).



Proportion of bear hunters reporting reason as very important or important

Figure 7. Reasons bear hunters cited as important factors in selecting their bear hunting location in Michigan during the 2004 bear hunting season. Error bars represent the 95% confidence limit.

Table 1. Number of people purchasing hunting licenses for the 2004 Michigan bear hunting seasons.

Management unit	Licenses available (quota)	Number of eligible applicants	Licenses sold <sup>a</sup>
Amasa	590	2,398	516
Baldwin	60	2,335	55
Baraga	2,180	5,824	1,762
Bergland	1,660	3,112	1,303
Carney	1,250	2,731	1,028
Drummond	20	479	17
Gladwin	200	924	157
Gwinn	1,340	3,868	1,081
Newberry	2,250	9,883	1,851
Red Oak	1,700	12,357	1,525
Statewide	11,250	43,911	9,295
Applicants opting for Preference Point <sup>b</sup>		10,920	

<sup>a</sup>Fewer licenses were sold than the number available because some successful applicants failed to purchase a license.

<sup>b</sup>Applicants that chose to receive a preference point rather than enter into the drawing for a hunting license.

Table 2. Estimated number of hunters, harvest, hunter success, and hunting effort during the 2004 Michigan bear hunting season.

Management unit	Hunters		Harvest		Hunter success		Hunting effort		Days per hunter ( $\bar{x}$ )	
	No.	95% CL <sup>a</sup>	No.	95% CL <sup>a</sup>	%	95% CL <sup>a</sup>	Days	95% CL <sup>a</sup>	Days	95% CL <sup>a</sup>
Amasa	493	9	158	21	32	4	3,878	275	7.9	0.5
Baldwin	55	0	22	3	41	5	253	13	4.6	0.2
Baraga	1,642	39	387	63	24	4	10,661	830	6.5	0.5
Bergland	1,218	29	332	51	27	4	8,475	768	7.0	0.6
Carney	944	25	238	38	25	4	8,972	699	9.5	0.7
Drummond	17	0	12	1	73	8	60	6	3.5	0.4
Gladwin	149	2	20	3	13	2	636	28	4.3	0.2
Gwinn	1,035	19	213	37	21	4	7,503	575	7.2	0.5
Newberry	1,712	32	493	54	29	3	12,609	766	7.4	0.4
Red Oak	1,449	22	345	42	24	3	7,562	369	5.2	0.2
Statewide <sup>b</sup>	8,714	70	2,221	120	25	1	60,609	1,703	7.0	0.2

<sup>a</sup> 95% confidence limits.

<sup>b</sup> Column totals may not equal statewide totals because of rounding errors.

Table 3. Estimated number of hunters, harvest, hunter success, hunting effort, hunter satisfaction, and hunt interference during the 2004 Michigan bear hunting season.

County	Hunters <sup>a</sup>		Harvest <sup>a</sup>		Hunter success		Hunting effort (days) <sup>a</sup>		Hunter satisfaction <sup>b</sup>		Interfered hunters <sup>c</sup>	
	Total	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	%	95% CL
Alcona	231	36	54	19	24	7	1,218	232	42	8	31	8
Alger	278	44	83	25	30	8	1,811	389	56	8	26	7
Alpena	169	31	33	15	19	8	862	193	44	10	19	8
Antrim	16	10	0	0	0	0	60	43	17	24	50	32
Arenac	1	1	0	0	0	0	4	3	100	0	0	0
Baraga	1,078	80	226	50	21	4	6,463	667	51	5	21	4
Benzie	10	8	1	1	11	11	19	16	33	27	11	11
Charlevoix	22	12	8	7	38	27	73	56	63	27	50	28
Cheboygan	125	29	24	13	20	9	546	156	51	12	33	11
Chippewa	453	52	142	31	31	6	3,489	558	63	6	26	6
Clare	34	4	5	2	14	5	112	18	41	7	14	5
Crawford	63	20	19	11	30	15	283	114	57	16	57	16
Delta	468	54	107	28	23	5	3,671	612	48	6	18	5
Dickinson	345	46	88	25	25	6	2,630	466	57	7	18	6
Emmet	58	21	22	12	38	17	271	120	57	18	34	17
Gladwin	68	14	2	1	3	2	303	80	38	11	43	10
Gogebic	475	56	111	32	23	6	3,626	641	51	7	21	6

<sup>a</sup>Number of hunters does not add up to statewide total because hunters can hunt in more than one county. Column totals for hunting effort and harvest may not equal statewide totals because of rounding errors.

<sup>b</sup>Proportion of hunters that rated their hunting experience as very good or good.

<sup>c</sup>Proportion of hunters that indicated that they experienced interference from other hunters (all types of hunters).

Table 3 (continued). Estimated number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunt interference during the 2004 Michigan bear hunting season.

County	Hunters <sup>a</sup>		Harvest <sup>a</sup>		Hunter success		Hunting effort (days) <sup>a</sup>		Hunter satisfaction <sup>b</sup>		Interfered hunters <sup>c</sup>	
	Total	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	%	95% CL
Gd. Traverse	2	1	1	1	50	23	9	5	50	23	0	0
Houghton	286	56	84	32	29	10	1,859	506	62	10	19	8
Iosco	25	6	4	2	14	6	139	35	38	10	53	11
Iron	320	26	102	18	32	5	2,371	293	61	6	17	4
Kalkaska	55	19	3	4	5	8	312	130	50	17	30	16
Keweenaw	145	42	22	17	15	11	1,086	456	45	15	30	14
Lake	13	2	6	2	42	9	56	10	42	9	33	9
Leelanau	1	1	0	0	0		1	1	100	0	0	0
Luce	464	53	111	29	24	6	3,115	495	56	7	26	6
Mackinac	222	40	46	19	21	8	1,463	365	58	9	21	8
Manistee	3	1	1	1	33	18	27	12	33	18	67	18
Marquette	666	67	124	33	19	5	4,875	688	49	6	20	5
Menominee	558	45	142	31	25	5	5,565	677	43	6	19	5
Missaukee	117	27	30	14	26	10	556	155	51	12	35	11
Montmorency	214	36	57	19	27	8	939	195	54	9	41	9
Newaygo	14	5	3	1	24	11	74	41	47	18	31	14
Ogemaw	40	4	9	2	24	5	179	22	35	6	29	6

<sup>a</sup>Number of hunters does not add up to statewide total because hunters can hunt in more than one county. Column totals for hunting effort and harvest may not equal statewide totals because of rounding errors.

<sup>b</sup>Proportion of hunters that rated their hunting experience as very good or good.

<sup>c</sup>Proportion of hunters that indicated that they experienced interference from other hunters (all types of hunters).

Table 3 (continued). Estimated number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunt interference during the 2004 Michigan bear hunting season.

County	Hunters <sup>a</sup>		Harvest <sup>a</sup>		Hunter success		Hunting effort (days) <sup>a</sup>		Hunter satisfaction <sup>b</sup>		Interfered hunters <sup>c</sup>	
	Total	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	%	95% CL
Ontonagon	653	68	197	43	30	6	4,079	610	58	6	26	6
Osceola	4	5	0	0	0	0	7	4	73	34	27	34
Oscoda	103	25	22	12	21	10	391	113	41	12	49	13
Otsego	92	26	16	10	18	10	430	150	52	14	33	13
Presque Isle	137	29	30	14	22	9	685	183	49	11	23	9
Roscommon	131	28	16	10	12	7	773	200	42	11	39	11
Schoolcraft	352	48	99	27	28	7	2,672	485	53	8	19	6
Wexford	30	9	10	2	34	12	128	56	57	15	24	13
Unknown	655	70	162	37	23	5	3,376	483	55	6	22	5

<sup>a</sup>Number of hunters does not add up to statewide total because hunters can hunt in more than one county. Column totals for hunting effort and harvest may not equal statewide totals because of rounding errors.

<sup>b</sup>Proportion of hunters that rated their hunting experience as very good or good.

<sup>c</sup>Proportion of hunters that indicated that they experienced interference from other hunters (all types of hunters).

Table 4. Estimated number and proportion of hunters hunting on private and public lands during the 2004 bear hunting season.

Management unit	Private land only				Public land only				Both private and public lands				Unknown land			
	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL
Amasa	197	22	40	4	190	22	39	4	102	18	21	4	4	4	1	1
Baldwin	8	2	14	3	28	3	51	5	19	2	35	4	0	0	0	0
Baraga	387	63	24	4	854	76	52	4	378	63	23	4	22	17	1	1
Bergland	244	45	20	4	709	58	58	5	244	45	20	4	22	15	2	1
Carney	549	45	58	4	214	36	23	4	175	34	19	4	6	7	1	1
Drummond	2	1	13	6	8	2	47	9	7	2	40	9	0	0	0	0
Gladwin	63	5	43	3	68	5	46	3	18	3	12	2	0	0	0	0
Gwinn	372	44	36	4	405	45	39	4	241	38	23	4	18	12	2	1
Newberry	607	57	35	3	813	60	47	3	283	44	17	3	9	9	1	1
Red Oak	745	50	51	3	536	48	37	3	160	31	11	2	8	7	1	1
Statewide	3,172	128	36	1	3,825	138	44	2	1,627	109	19	1	90	29	1	0

Table 5. Estimated number of days of hunting effort on private and public lands during the 2004 Michigan bear hunting season.

Management unit	Private lands		Public lands		Both private and public lands		Unknown	
	Total	95% CL	Total	95% CL	Total	95% CL	Total	95% CL
Amasa	1,505	251	1,552	244	817	168	4	6
Baldwin	31	8	141	17	80	12	0	0
Baraga	2,501	554	5,473	761	2,634	562	53	56
Bergland	1,591	438	4,400	583	2,421	630	63	52
Carney	5,562	692	1,860	428	1,510	390	39	44
Drummond	8	3	29	6	23	7	0	0
Gladwin	225	22	326	31	86	19	0	0
Gwinn	2,738	476	2,622	408	2,016	430	128	152
Newberry	4,235	567	5,741	629	2,602	538	31	50
Red Oak	3,931	363	2,811	318	799	199	22	24
Statewide <sup>a</sup>	22,326	1,312	24,955	1,351	12,988	1,186	340	184

<sup>a</sup>Column totals may not equal statewide totals because of rounding errors.

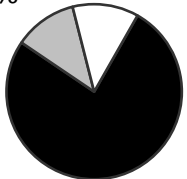


Table 6. Number of applicants, licenses sold, and estimated number of hunters, harvest, hunting effort (days), and hunting success during Michigan bear hunting season, 1997-2004.

Region	Year						
	1998	1999	2000	2001	2002	2003	2004
Upper Peninsula							
Applicants	25,620	26,833	31,277	31,666	29,112	27,344	28,295
Licenses sold	5,242	5,818	6,786	8,337	7,393	7,453	7,558
Hunters	4,961	5,511	6,308	6,492	6,949	6,939	7,062
Harvest	1,353	1,590	1,781	1,990	1,962	2,026	1,834
Males (%)	59	65	58	59	62	62	63
Females (%)	40	34	40	39	37	38	36
Unknown (%)	1	1	2	2	1	1	1
Hunter-days	37,123	40,452	45,403	46,719	51,452	54,333	52,158
Hunter success (%)	27	29	28	31	28	29	26
Lower Peninsula							
Applicants	10,295	11,073	13,887	14,674	14,370	14,297	15,616
Licenses sold	1,039	1,062	1,113	1,544	1,711	1,761	1,737
Hunters	993	1,005	1,058	1,247	1,626	1,695	1,653
Harvest	192	227	230	279	320	439	388
Males (%)	63	64	57	55	70	52	61
Females (%)	35	36	41	45	29	47	38
Unknown (%)	2	0	2	0	1	1	1
Hunter-days	4,629	5,069	5,259	6,204	8,465	8,592	8,451
Hunter success (%)	19	23	22	22	20	26	23
Statewide	35,915	37,906	45,164	46,340	43,482	41,641	43,911
Applicants <sup>a</sup>	35,915	37,906	48,696	53,179	51,686	50,908	54,831
Licenses sold	6,281	6,880	7,899	9,881	9,104	9,214	9,295
Hunters	5,956	6,516	7,365	7,739	8,575	8,634	8,714
Harvest	1,545	1,817	2,011	2,268	2,282	2,465	2,221
Males (%)	59	65	58	58	63	60	62
Females (%)	39	34	40	40	36	39	36
Unknown (%)	2	1	2	2	1	1	1
Hunter-days	41,752	45,521	50,664	52,923	59,917	62,925	60,609
Hunter success (%)	26	28	27	29	27	29	25

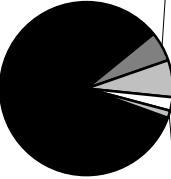
<sup>a</sup>Beginning in 2000, the number of applicants statewide also included people that applied for a preference point.

Table 7. Hunting equipment used to hunt bear in Michigan, 2004.

Equipment	Number of hunters	95% CL <sup>a</sup>	Equipment used (%)
Firearm	6,598	128	 <p>Archery 12% Both 12% Firearm 76%</p>
Archery	1,014	89	
Both firearm and archery	1,069	87	
Unknown	33	18	

<sup>a</sup>95% confidence limits.

Table 8. Primary hunting methods used to hunt bear in Michigan, 2004.

Method	Number of hunters	95% CL <sup>a</sup>	Method used (%)
Bait only	7,285	117	 <p>Dogs Only 6% Dogs &amp; Bait 7% Other 3% Unknown 1% Bait Only 83%</p>
Dogs only	491	64	
Dogs and bait	587	69	
Other	241	46	
Unknown	110	30	

<sup>a</sup>95% confidence limits.

Table 9. Hunting methods used to harvest bear in Michigan, 2004.

Method	Number of hunters	95% CL <sup>a</sup>	Method used (%)
Bait only	1,729	110	<p>Dogs &amp; Bait 12%</p> <p>Dogs Only 9%</p> <p>Other 0.4%</p> <p>Unknown 1.2%</p> <p>Bait Only 78%</p>
Dogs only	199	40	
Dogs and bait	256	46	
Other	10	9	
Unknown	27	15	

<sup>a</sup>95% confidence limits.

Table 10. Level of hunter success, interference, and satisfaction of bear hunters with their hunting experience in Michigan during the 2004 season.

Management unit	Hunter success (%)	Hunters interfered by other hunters (%) <sup>a</sup>	Hunters interfered by other bear hunters (%)	Satisfaction level (%)					
				Very good	Good	Neutral	Poor	Very poor	No answer
Amasa	32	20	16	26	30	24	12	7	1
Baldwin	41	33	20	29	27	27	12	6	0
Baraga	24	21	17	20	33	20	15	9	3
Bergland	27	22	19	20	36	20	15	6	2
Carney	25	19	14	17	28	30	17	5	3
Drummond	73	20	20	60	7	27	7	0	0
Gladwin	13	31	18	16	21	22	18	17	6
Gwinn	21	22	16	17	33	26	14	6	3
Newberry	29	23	19	25	32	20	14	7	2
Red Oak	24	34	23	18	29	18	18	14	3
Statewide	25	24	18	20	31	22	15	8	3

<sup>a</sup>Includes all types of hunters.

## Appendix A

### 2004 Michigan Bear Harvest Questionnaire



MICHIGAN DEPARTMENT OF NATURAL RESOURCES – WILDLIFE  
PO BOX 30030 LANSING MI 48909-7530

## 2004 MICHIGAN BEAR HARVEST REPORT

This information is requested under authority of Part 435, 1994 PA 451, M.C.L. 324.43539.



***It is important that you complete and return this report even if you did not hunt or harvest a bear.***

1. Did you hunt bear in Michigan during the 2004 season?

<sup>1</sup> ☐ Yes      <sup>2</sup> ☐ No; skip to question 11 on the reverse side

2. Please report the number of days for each county that you hunted bear in the following table.

COUNTY HUNTED (List each county that you hunted for bear)	NUMBER OF DAYS HUNTED	TYPE OF LAND		
		<sup>1</sup> <input type="checkbox"/> Private	<sup>2</sup> <input type="checkbox"/> Public	<sup>3</sup> <input type="checkbox"/> Both
		<sup>1</sup> <input type="checkbox"/> Private	<sup>2</sup> <input type="checkbox"/> Public	<sup>3</sup> <input type="checkbox"/> Both
		<sup>1</sup> <input type="checkbox"/> Private	<sup>2</sup> <input type="checkbox"/> Public	<sup>3</sup> <input type="checkbox"/> Both
		<sup>1</sup> <input type="checkbox"/> Private	<sup>2</sup> <input type="checkbox"/> Public	<sup>3</sup> <input type="checkbox"/> Both
		<sup>1</sup> <input type="checkbox"/> Private	<sup>2</sup> <input type="checkbox"/> Public	<sup>3</sup> <input type="checkbox"/> Both

3. Did you hunt with a firearm or a bow during the 2004 bear season?

<sup>1</sup> ☐ Firearm      <sup>2</sup> ☐ Bow      <sup>3</sup> ☐ Both

4. What hunting method did you most often use when hunting bear in Michigan during the 2004 bear season? (*please select only one item*)

<sup>1</sup> ☐ Hunted over bait only      <sup>2</sup> ☐ Used dogs only (bait not used)  
<sup>3</sup> ☐ Used dogs started over bait      <sup>4</sup> ☐ Used other methods not involving dogs or bait

***Please continue on back***

5. Was your harvest tag put on a bear? (If no, please skip to question 7)

<sup>1</sup> ☐ Yes

<sup>2</sup> ☐ No

6. If your harvest tag was put on a bear, please fill in the information below

a. What date was the bear harvested?

(please check [X] the box for the date of harvest)

September 2004						
S	M	T	W	T	F	S
					10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

October 2004						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26				

b. What was the sex of the bear?

<sup>1</sup> ☐ Male

<sup>2</sup> ☐ Female

<sup>3</sup> ☐ Not sure

c. In what county was it harvested?

(please write in the county name)

d. On what type of land was the bear harvested?

<sup>1</sup> ☐ Private

<sup>2</sup> ☐ Public

e. What was the method of harvest?

<sup>1</sup> ☐ Taken over bait

<sup>2</sup> ☐ Used dogs (bait not used)

<sup>3</sup> ☐ Used dogs started over bait

<sup>4</sup> ☐ Used other methods not involving dogs or bait

7. Did other hunters interfere with your bear hunting?

<sup>1</sup> ☐ Yes

<sup>2</sup> ☐ No (skip to question 9)

8. If you answered "yes" to the previous question, was the interference caused by other bear hunters?

<sup>1</sup> ☐ Yes

<sup>2</sup> ☐ No

9. Overall, how would you rate your 2004 bear hunting experiences?

<sup>1</sup> ☐ Very Good

<sup>2</sup> ☐ Good

<sup>3</sup> ☐ Neutral

<sup>4</sup> ☐ Poor

<sup>5</sup> ☐ Very Poor

10. How important were the following factors for selecting the location where you hunted bear in 2004?

Very Important

Important

Slightly Important

Not Important

Not Sure

A. The area had a high density of bears.

<sup>1</sup> ☐ <sup>2</sup> ☐ <sup>3</sup> ☐ <sup>4</sup> ☐ <sup>5</sup> ☐

B. The area had a large amount of public land or commercial forest.

<sup>1</sup> ☐ <sup>2</sup> ☐ <sup>3</sup> ☐ <sup>4</sup> ☐ <sup>5</sup> ☐

C. Hunting pressure was low.

<sup>1</sup> ☐ <sup>2</sup> ☐ <sup>3</sup> ☐ <sup>4</sup> ☐ <sup>5</sup> ☐

D. I owned the property where I hunted or it was near my property.

<sup>1</sup> ☐ <sup>2</sup> ☐ <sup>3</sup> ☐ <sup>4</sup> ☐ <sup>5</sup> ☐

E. I have traditionally hunted this area.

<sup>1</sup> ☐ <sup>2</sup> ☐ <sup>3</sup> ☐ <sup>4</sup> ☐ <sup>5</sup> ☐

F. I hunted property owned by a hunt club in this area.

<sup>1</sup> ☐ <sup>2</sup> ☐ <sup>3</sup> ☐ <sup>4</sup> ☐ <sup>5</sup> ☐

11. In 2000, a preference point system was implemented for distributing bear hunting licenses in Michigan. Which of the following best describes your opinion about the system?

(please select one choice)

<sup>1</sup> ☐ Strongly Approve

<sup>2</sup> ☐ Approve

<sup>3</sup> ☐ Not Sure

<sup>4</sup> ☐ Disapprove

<sup>5</sup> ☐ Strongly Disapprove

**Return the completed report in the enclosed postage-paid envelope. Thanks for your help.**